

MODIS IOT Weekly Report

Mission Operations Days: 2000/183 to 2000/189

June 30, 2000 20:00:00 GMT to July 7, 2000 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

MODIS has an anomaly with the LWIR focal plane. See description below.

Blackbody	A On; B Off	Nominal
Calibration Electronics	A On; B Off	Nominal
Control Processor	A On; B Off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A On; B off	Nominal
FIFO Memory	1 & 2 On; 3 & 4 Off	Nominal
Format Processor	A On; B off	Nominal
PC FPA	A On	Nominal
Power Supply: 1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	A On	Nominal
NIR	A On	Nominal
SMIR	A On	Nominal
LWIR	A On	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A On; B off	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On; B Off	Nominal
Flight Software	Rev BD	Nominal
Inhibit Ids Set	None	Nominal
TMONs enabled	66,67	Nominal

This Week's Completed MODIS Activities:

Saturday, July 1, 2000

None

Sunday, July 2, 2000

None

Monday, July 3, 2000

185/12:01:02 ATC OA19 SRCA Full Radiometric

Tuesday, July 4, 2000

None

Wednesday, July 5, 2000

187/11:48:43 ATC OA23 SRCA Full Spatial

187/12:00:00 ATC - Blackbody to 270K

Thursday, July 6, 2000

188/06:00:00 ATC Blackbody to 280K

188/10:00:00 ATC Blackbody to 285K

188/12:00:00 ATC Blackbody to 290K

188/14:00:00 ATC Blackbody to 295K

188/14:37:41 Real-time Set Blackbody duty cycle to 100%

188/16:00:00 ATC Blackbody to 300K

188/18:00:00 ATC Blackbody to 315K

188/20:05:00 ATC Blackbody to 270K

188/20:29:16 Real-time Set Blackbody duty cycle to 33%

Friday, July 7, 2000

189/08:15:38 ATC OA22 SRCA Full Spectral, 30W part I

189/10:10:25 ATC OA22 SRCA Full Spectral, 30W part II

189/11:32:52 ATC OA22 SRCA Full Spectral, 10W part I

189/14:06:09 ATC OA22 SRCA Full Spectral, 10W part II

189/19:00:00 ATC Blackbody to 290K

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

Saturday, July 8, 2000

None

Sunday, July 9, 2000

None

Monday, July 10, 2000

192/20:02:00 ATC - Blackbody to 270K

Tuesday, July 11, 2000

193/14:00:00 ATC Blackbody to 315K

193/14:?? Real-time Set Blackbody duty cycle to 100%

193/21:00:00 ATC Blackbody to 270K

193/21:?? Real-time Set Blackbody duty cycle to 33%

Wednesday, July 12, 2000

194/19:00:00 ATC Blackbody to 290K

Thursday, July 13, 2000

None

Friday, July 14, 2000

None

Maneuvers:

Friday, July 21, 2000 - MODIS Roll Maneuver (2000/203/12:07:22 – 12:25:24)

MODIS Anomalies:

The Radiative Cooler has negative margin, therefore the cold focal planes are no longer under thermal control. This affects bands 5, 6, 7, and 20-36. Analysis is underway. Solar Diffuser Door operations are suspended during this analysis.

Current maximum and minimum temperature ranges of the LWIR FPA:

Thursday, July 6, 2000:

188-22:21:40 = 83.775K

188-23:22:10 = 83.597K

General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open.

MODIS Telemetry Trends:

See MODIS Anomalies section.

Non-MODIS Significant Events:

Data processing by EDOS is currently running at a "degraded level". For a detailed summary of the events that have affected their products, view the EOS System Status web page (<http://jupiter02.gsfc.nasa.gov:591/sysstat/>) and select the EDOS summary link at the top of the page. A key item to note is from day 6/27/2000 at 12:11:19 PM: " The second major issue is the amount of data that EDOS is receiving since ASTER has been fully turned on." With the new, higher data output of ASTER, even less "spare" time will be available to EDOS for the processing of backlogged or reprocessing of data.

Limited Life Item Status:

SRCA 10W Lamp #1: 170.1 of 500 hours
SRCA 10W Lamp #2: 134.3 of 500 hours
SRCA 10W Lamp #3: 143.5 of 500 hours
SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 555.3 of 4000 hours
SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1381 of 3022 Movements
Nadir Aperture Door: 532 of 1316 Movements
Space View Door: 437 of 1316 Movements